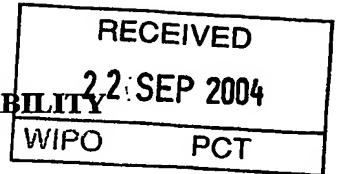


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 2021102PC/or	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/FI 2002/000742	International filing date (<i>day/month/year</i>) 18.09.2002	Priority date (<i>day/month/year</i>)
International Patent Classification (IPC) or national classification and IPC H04Q 7/30, H04J 3/16		
Applicant Nokia Corporation et al		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: <div style="margin-left: 20px;"> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;">a. <input type="checkbox"/></div> <div> <p>(<i>sent to the applicant and to the International Bureau</i>) a total of _____ sheets, as follows:</p> <div style="margin-left: 20px;"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. </div> </div> </div> <div style="margin-left: 20px; margin-top: 10px;"> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;">b. <input type="checkbox"/></div> <div> <p>(<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> </div> </div> </div> </div>
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"><input checked="" type="checkbox"/></div> <div>Box No. I Basis of the report</div> </div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. II Priority</div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. IV Lack of unity of invention</div> <div style="margin-left: 20px; margin-top: 5px;"><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. VI Certain documents cited</div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. VII Certain defects in the international application</div> <div style="margin-left: 20px; margin-top: 5px;"><input type="checkbox"/> Box No. VIII Certain observations on the international application</div> </div>

Date of submission of the demand 21.08.2003	Date of completion of this report 31.08.2004
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Catharina Karlsson /OGU Telephone No. +46 8 782 25 00

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2002/000742

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2002/000742

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-28</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-28</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-28</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The claimed invention

The present invention solves the problem that the base station does not managing the radio resources according to load situation in the transport network.

Reference is made to the following documents:

D1: US5678178 A

D2: WO0232174 A1

D3: US5844886 A

D4: TOLLI A. ET AL.: 'Performance evaluation of common radio resource management (CRRM)' IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 2002. ICC 2002 vol. 5, 28 April 2002 - 02 May 2002, NEW YORK, NY. USA, pages 3429 - 3433.

D1 relates to a mobile communications network where base transceiver stations and higher-level network elements are connected to nodes of a SDH network for dynamic establishment of digital transmission links. The network management of the SDH network is capable of dynamic allocation of transmission capacity of the transmission network to base transceiver stations or higher-level network elements according to their traffic load, (abstract).

D2 discloses base station controllers and the radio network controllers connected to a common radio resource manager CRRM. The CRRM controls the features of radio resource management relating to multiple cells.

D3 reveals a system for and method of network management under traffic overload.

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

D4 describes common radio resource management (CRRM) for traffic management, abstract.

Reasoned statement

None of the cited documents disclose the solution of the present invention: the base station adjusts the radio capacity information based on the transport capacity.

Neither does the cited prior art give any indication that would lead a person skilled in the art to the claimed method of and system for managing the radio resources. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1- 28 is novel and is considered to involve an inventive step. The invention is industrially applicable.